Summary of the
ELAB PBMS Subcommittee Teleconference
January 30, 1997

The Performance Based Measurement System (PMBS) Subcommittee of the Environmental Laboratory Advisory Board (ELAB) convened by teleconference on January 30, 1997, at 1:00 p.m.EST. The meeting was led by its chair, Dr. Kathy Hillig. Action items are listed in Appendix A. The participants are listed in Appendix B.

Following a role call, there was a discussion of the purpose of the subcommittee and the intended outcome of its deliberations. The committee discussed the possibility that it should make recommendations to ELAB, endorse or discourage EPA from pursuing a PBMS, or articulate issues of concern to the private sector. It was noted that the subcommittee was to articulate its charge. It was felt that the elucidation and discussion of the issues would help identify where there was consensus. A more detailed discussion of a few of the earlier identified issues followed.

One point that was discussed and agreed upon was that ELAB should encourage EPA to take whatever steps possible to assure the greatest degree of consistency of implementation across the various Program Offices. This effort will have to be implemented at the highest possible levels in EPA in order to be effective.

Another point that was agreed upon was that a critical and essential preparatory step to implementation of PBMS (or 304(h) Streamlining) would be the training of assessors or personnel responsible for laboratory audits. This includes both state and federal assessors. Since some aspects of implementation of PBMS represent a significant departure from the current system, assessors need appropriate training to assure their understanding of their duties for correct implementation.

Two general approaches to implementing PBMS were described. The first was setting criteria (DQOs) as required for each individual purpose and then establishing the tests necessary to demonstrate that DQOs were met. The analyst could then choose any analytical technique provided they performed the prescribed tests and demonstrated the procedure met the criteria.

The second approach was to use a comparison to a reference method. Again, a set of appropriate tests would have to be established; but, instead of using DQOs as the criteria, the determination of equivalence would be comparison to the performance of a reference method.

There was much discussion as to the relative merits of the two approaches. It was noted that the Office of Water seems to be moving towards a reference method approach. Office of Solid Waste seems to prefer a DQO approach. Presently, the Office of Air Quality Planning and Standards uses a reference method approach, but allows use of an alternative method provided 301 validation protocol standards are met. The Office of Mobile Sources is just beginning deliberations on PBMS.

There was a great deal of discussion and consensus about the importance of reference methods. It was generally agreed that there is a need for a reference method. It was suggested that reference methods were a necessary interim requirement until DQOs could be established by each Program Office. Concern was expressed that if a DQO approach (either as a component of an interim step or as the longer term final goal) was adopted, there was the possibility that state or federal regulators could set unachievable DQOs based on some criteria (e.g. a risk assessment). Such a scenario would be unacceptable to the regulated community.

A strong recommendation was made for the reference method approach, with the requirement that EPA demonstrate or document that the reference method works for the various matrices for which it is intended. It was suggested that a report be prepared summarizing all the data which supports or delineates the limits of the reference methods validation. Perhaps it could become the duty of Federal labs to provide the studies necessary to prepare such a document.

This discussion lead to an acknowledgment from the participants that many candidate reference methods (i.e. those methods which are in common use) may not be valid or may not work for some matrices. It was noted that this is not a unique problem with PBMS (or a PBMS approach requiring a reference method) but that it is a current problem with the existing system. There was some discussion as to the importance and implications of this observation and there were some suggestions made (e.g. require that all new methods be fully validated, draw upon the DMR QA data where it exists for a given matrix, look at using the matrix validation data each lab is required to perform in some of the existing wastewater/drinking water methods), but there was no clear resolution. It was noted that this issue needed to be addressed in the implementation of PBMS.

There was no resolution or consensus to the acceptability of a DQO based program. One possibility discussed was requiring any DQO based program to have a requirement that EPA demonstrate that there exists an analytical protocol capable of achieving the DQO for whatever matrix it is applicable to. There was no consensus on this; and the question will require further discussion.

The committee spent some time on communication problems. The sub-committee specifically noted that the lack of logistical support from EPA should be addressed. Kathy Hillig recapped (summary given in Appendix A) and identified times set aside during the Interim NELAC Meeting for the subcommittee to continue the discussion (Tuesday, 2/4/97 from 5 to 6 PM) and for ELAB to receive public input (Wednesday 2/5/97, 4-5 PM).

The call was adjourned at 2:30 PM EST.

Appendix A

Appendix A

ACTION ITEMS
ELAB PBMS Subcommittee Teleconference
January 30, 1997

Item No.	Action	Date Completed
1.	ELAB should encourage senior EPA officials to encourage the highest level of coordination an consistency between the various Program Offices in their implementation of PBMS.	
2.	Training of assessors or personnel responsible for laboratory audits should be established prior to implementation of PBMS.	
3.	All Offices must ensure that reference methods exist that are capable of meeting any regulatory requirement.	
4.	All reference methods must be validated in the appropriate matrix and that validation must be documented.	

[a] Note that Items 1 and 2 were accepted as recommendations by ELAB at the February 6th meeting in Bethesda, MD.

Appendix B

List of Participants
ELAB PBMS Subcommittee Teleconference
January 30, 1997

Name	Affiliation	Telephones
Kathy Hillig Chair	BASF Corporation	Tel: 313-246-5334 Fax: 313-246-5226 E-mail: hilligk@npol.southgate.basf-corp.com
Mike Conlon	Lab Strategy Group	Tel: 703-913-1314 Fax: 703-913-1314 E-mail:
Larry LaFleur	NCASI	Tel: 541-752-8801 Fax: 541-752-8806 E-mail: llafleur@wcrc-ncasi.org
Cynthia Lee	Analytical Services Laboratory	Tel: 502-962-6400 Fax: 502-962-6411 E-mail:
Jeanne Mourrain, Designated Federal Officer	USEPA, NERL-Research Triangle Park	Tel: 919-541-1120 Fax: 919-541-4101 E-mail: mourrainjeanne@epamail.epa.gov
Tony Pagliaro (Absent)	ACIL	Tel: 202-887-5872 Fax: 202-887-0021 E-mail: acil@ix.netcom.com
Jerry Parr	Quanterra Environmental Service	Tel: 303-421-6611 Fax: 303-467-9136 E-mail: jerryparr@msn.com
Jerry Thoma	Environmental Health Laboratories	Tel: 219-233-4777 Fax: 219-233-8207 E-mail:
Mimi Uhlfelder (Absent)	EA Laboratories	Tel: 301-771-4920 Fax: 301-771-4407 E-mail: mmu@eaeng.mhs.compuserve.com
Al Verstuyft	Amc Petro Inst.	Tel: 510-242-3403 Fax: 510-242-5320 E-mail: awve@chevron.com